

REMARKS

This timely responds the Final Office Action mailed on July 27, 2004. Currently, claims 1-9 and 11-51 are pending in the application, of which claims 5-7, 16-18 and 25-51 have been withdrawn from consideration. Accordingly, claims 1-4, 8, 9, 11-15 and 19-24 are active in this application, of which claims 1 and 9 are independent. The Office Action indicates that claims 8, 14 and 19 are objected to but allowable if presented in independent form.

In view of the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

Rejections Under 35 U.S.C. §103

Claims 1-4, 9, 11-13, 15 and 20-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Patent No. 4,955,697 issued to Tsukada, *et al.* ("Tsukada") in view of U. S. Patent No. 5,877,830 issued to Shimada, *et al.* ("Shimada"). Applicant respectfully traverses this rejection for at least the following reasons.

With respect to claims 1-4, independent claim 1 recites "each pixel on a first row has an opening ratio different from that of each pixel on the rest of the rows" (note: the rest of the rows means the second row to the last row). In this regard, the Examiner admitted:

"Tsukada does not explicitly disclose a black matrix defining each pixel; wherein each pixel on a first row has an opening ratio different from that of the pixels at the rest of the pixel rows ..." (Office Action, page 3).

Regarding this missing feature, the Examiner stated:

"Shimada teaches (Title, Abstract, entire patent) a liquid crystal display (LCD) panel comprising: ... wherein the pixels regions in a peripheral portion of the matrix arrangement has an aperture ratio lower than that of the pixel regions in other portions

of the matrix arrangement (col. 2, lines 2-12 and col. 6, lines 35-45) in the example where the black matrix overlaps the pixel electrodes 11 (col. 2, lines 29-42), in area where no gate or data line exists to prevent light leaks in areas where no gate or data line exists despite mating substrate misalignment” (Office Action, pages 3-4).

On this basis, the Examiner took the position that:

“Shimada is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add an opening ratio of each pixel at the first pixel row is different from the opening ratio of the pixels at the other pixel rows ... to prevent light leaks in area where no gate or data line exists despite mating substrate misalignment and to allow improved aperture ratio and reduced disclination” (Office Action, page 5).

From the above position, the Examiner asserted:

“Therefore, it would have been obvious ... to modify the LCD of Tsukada with the opening ratio of each pixel at the first pixel row is different from the opening ratio of the pixel at the other pixel rows ... to prevent light leaks in areas where no gate or data line exists despite mating substrate misalignment and to allow improved aperture ratio and reduced disclination” (Office Action, page 5)

This assertion is respectfully disagreed with for the following reasons.

First, none of the cited references *discloses or suggests* “each pixel on a first row has an opening ratio different from that of each pixel on the rest of the rows”. As the Examiner has implicitly admitted, Shimada fails to disclose this claimed feature. Thus, both Tsukada and Shimada fail to disclose this claimed feature. Also, none of the cited references recognizes (a) the problems to which the claimed invention is suggesting the solution and (b) a need for *deliberately differentiating* the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row). Thus, it would not be possible

for those references to suggest *deliberately differentiating* the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row).

Second, as well known, “the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure” *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The Examiner did not point out where in the cited references teaches or suggests a motivation for *deliberately differentiating* the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row). Thus, it is submitted that the Examiner fails to establish that the cited references suggests a motivation for deliberately differentiating the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row), as claimed.

Third, as well known, the reference must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention. As mentioned above, the cited references fail to (a) recognize the problems to which the claimed invention is directed, (b) show a need for deliberately differentiating the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row), and (c) show a motivation for deliberately differentiating the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row).

Based on these circumstances, the only explanation as to how the Examiner arrived at a conclusion that Shimada suggests deliberately differentiating the opening ratio of the first row from that of the rest of the rows (note: the rest of the rows means the second row to the last row) appears to be the situation where the Examiner views the references with the benefit of impermissible hindsight vision afforded by the claimed invention. If the Examiner had reviewed

the cited references without the benefit of impermissible hindsight vision afforded by the claimed invention, the Examiner would not have arrived at the same conclusion.

For these reasons, it is submitted that the Examiner has not established a *prima facie* case of obviousness of claim 1. Thus, it is submitted that claim 1 is patentable over the cited references. Claims 2-4 that are dependent from claim 1 would also be patentable at least for the same reasons.

With respect to claim 9, 11-13, 15 and 20-24, independent claim 9 recites “each pixel on the first row has an opening ratio different from that of each pixel on the rest of the rows” (note: the rest of the rows means the second row to the last row). As previously mentioned, none of the cited references discloses or suggests these claimed features. Thus, it is submitted that claim 9 and its dependent claims 11-13, 15 and 20-24 are patentable over the cited references.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. §103(a) rejection of claims 1-4, 9, 11-13, 15 and 20-24.


CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,


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